Flawed Lessons Learned:

The Role of U.S. Military Attachés in Assessing

by George F. Hofmann, Ph.D.

This article examines tank warfare during the Spanish Civil War (1936-1939) and the effect military attaché reports had on influencing U.S. Army doctrine. For many countries, including the United States, the civil war provided a proving ground for formulating warfighting doctrine, including a reassessment over future strategic and tactical missions of armor. At the War Department in Washington, D.C., the G2 Military Intelligence Division (MID) started accumulating large numbers of intelligence reports from attachés in Spain and Europe. As result, the Army staff began to reexamine its warfighting doctrine, as did the mechanized cavalry at Fort Knox.

The first significant deployment of tanks during the civil war occurred late in October 1936 after 50 six-ton T26s arrived in the left-wing Spanish republican government from the Soviet Union. The T26s were a licensed copy of the British Vickers Cardon-Lloyd and designed by the Red Army to be deployed as infantry accompanying tanks.

Red Army tank crews took charge early in the civil war in support of a government nonmechanized infantry attack against nationalist fascists at Sesena. Fifteen T26s were anxiously deployed without supporting infantry. In spite of the confusion, the T26s scattered insurgents for days in the village and surrounding areas, including destroying a few Italian tankettes that were armed with machine guns and flamethrowers. The republican forces, however, were unable to consolidate the attack because of a lack of coordinated command and control between tank crews and infantry. As we shall see, this lack of coordination that attachés reported proved to be characteristic over and over again during the civil war, thus influencing Army's elites to reassess U.S. tank doctrine.

The following month, Colonel Stephen O. Fuqua reported on the disjointed Sesena operation. He was the U.S. Army Chief of Infantry from 1929 to 1933, and at that time, an outspoken proponent that tanks were strictly infantry accompanying weapons. Furthermore, he believed that in modern warfare there was no place for armored cavalry. Fuqua had an unrestricted pass in republican-controlled Spain and over the years sent numerous attaché reports to the MID for analysis and distribution to various army schools and combat arms branches. He reported that the T26s were vulnerable to antitank guns because of their light armor. More so, he believed tanks operating alone were doomed to disaster. Fuqua found tank crews at Sesena neither efficient nor exhibiting sufficient cooperation with other combat arms. He soon realized and reported that the war was becoming brutal and he expected a long, drawn-out conflict. Correctly, Fuqua anticipated it would be a war of total annihilation rather than a war of subjugation.

Armored Warfare during the Spanish Civil War

Early in 1937, the U.S. Army attaché in London reiterated Fuqua's observations, reporting that the T26s would have been more successful if supported by republican militiamen. One of the problems, he noted, was that the militiamen were mediocre and undisciplined. Even at this early stage in the civil war, it was evident to the attaché that there was little knowledge exhibited by the combatants on the tactical use of new weapons, especially tanks. There was no training organization for incorporating tanks with infantry. One reason offered by the attaché was that Spaniards were not considered products of a motorized society; therefore, they had problems managing and handling modern military equipment. The report to the MID warned that the poor quality of the combatants justified prudence in assessing lessons, especially avoiding early conclusions on military operations in Spain. One intelligence source in England also blamed initial tank failures on the crews, commenting that some Spanish tankers were so shaken at seeing their comrades burned to death that they resorted to any method necessary to avoid combat.

Meanwhile, the U.S. Army attaché in Paris reported to the MID that tanks used by the nationalists, such as the slow-moving obsolete Renault, the 6-ton German PzKpfw I armed with two machine guns, and the 3-ton Italian Fiat-Ansaldo tankettes, were all too lightly armored as were the republican's T26s. Antitank guns firing solid armor-piercing projectiles, he reported, easily penetrated these tanks. It was noted that the most effective and popular antitank weapon used by the nationalists was the Wehrmacht's PAK 36 37mm antitank gun. The nationalists also used Bodensperren ground barriers, a horizontal-sided camouflaged trench designed to trap and hold tanks, thus making them susceptible to destruction by hand-delivered petrol containers called "Molotov cocktails." Many military observers now assumed that the reputation of the tank as an independent fighting vehicle was over.

In the meantime, General Francisco Franco continued the nationalist siege of Madrid. To deal with Franco's attempt to encircle and capture the city, international volunteers were formed into infantry brigades, along with a newly formed Soviet/Spanish tank brigade under Red Army tank expert, Demetri G. Pavlov. These republican units repeatedly shattered Franco's forces. Enrique Lister, a prominent communist military commander, who participated with Pavlov in the defense of Madrid, claimed the T26s were useful in counterattacking and overcoming national defense lines. However, on one occasion, Pavlov was unable to expand an attack because of a lack of tanks and accompanying infantry.

At the same time, an *Associated Press* correspondent, who recently returned from Madrid, commented to the U.S. Army attaché in Paris that the Soviets were becoming somewhat lukewarm toward the Spanish political situation, because both bel-

ligerents were burdened with too many diverse political and tactical views. These differences, he told the attaché, were so complex that it could drag out the war. The correspondent believed that when the war was finally resolved, it was questionable whether the country would embrace communism. The correspondent also observed that Spaniards were entirely too individualistic to accept communism, but would make ideal anarchists. Apparently, the republicans were beginning to question the Soviet-style of communism that was being politically interjected into their war aims.

By now, considerable opinions over the tactical deployment of tanks were being expressed and reported to the MID by the attachés. The attaché in London reported a conversation he had with the German attaché, who was concerned over the combat capabilities of the PzKpfw I. His negative assessment was made because of the effectiveness of antitank guns. It was evident to the German attaché that the light PzKpfw I was a poor assault vehicle. After the conversation, the U.S. Army attaché reported that, at this time, drawing conclusions was risky, reasoning that modern weapons being used in Spain were still unfamiliar and probably ill-used in most military engagements.

Discouraged in their attempts to capture Madrid, the nationalists now turned north of Madrid toward Guadalajara. The purpose was to break the stabilized situation by outflanking besieged Madrid with an Italian motorized corps from the north and then linking up with nationalist forces. The goal of the corps' motorized divisions was to execute a deep operation with speed and surprise, attacking south between the Tajuna and Henares rivers over the Madrid-Zaragoza highway that paralleled the rivers. The divisions had a mixture of Fiat-Ansaldo tankettes, armored cars, infantry, field artillery, engineers, chemical, and antitank gun elements. Tactical airpower was tasked to support the motorized ground attack.

On 8 March 1937, the motorized divisions started their attack. The Italians, however, failed to take into account developing meteorological conditions. Freezing temperatures, snow and rain, and a cold wind soon began to sweep across the *meseta,* turning the ground into a quagmire of mud, thus grounding planned air support. Resistance at first was light, and as a result, the attack made some progress.

On the 10th, a republican scout plane, flying from the south and less hampered by weather, spotted the Italians entrucked and strung out for miles along the highway. The surprise was now lost. Subsequently, the republican forces began to move infantry reinforcements and Pavlov's tanks to deal with the threat. On the 12th and subsequent days, the long Italian columns were subjected to persistent and devastating air attacks by Soviet volunteer flyers, causing many of the motorized vehicles and the Fiat-Ansaldo tankettes to scatter off the road and into the mud. Republican ground forces moved into action, taking advantage of the immobilized and confused Italians. The Fiat-Ansaldos proved no match for the T26s' 45mm tank cannons, as few were destroyed and captured. Demoralized, the Italians began a hasty retreat, but not before blunting an attack by republican forces. This final action of the campaign allowed the Italians to recover and return to their original line of deployment. It was an embarrassing defeat, especially for the pompous Benito Mussolini, the fascist dictator of Italy and a Franco supporter.

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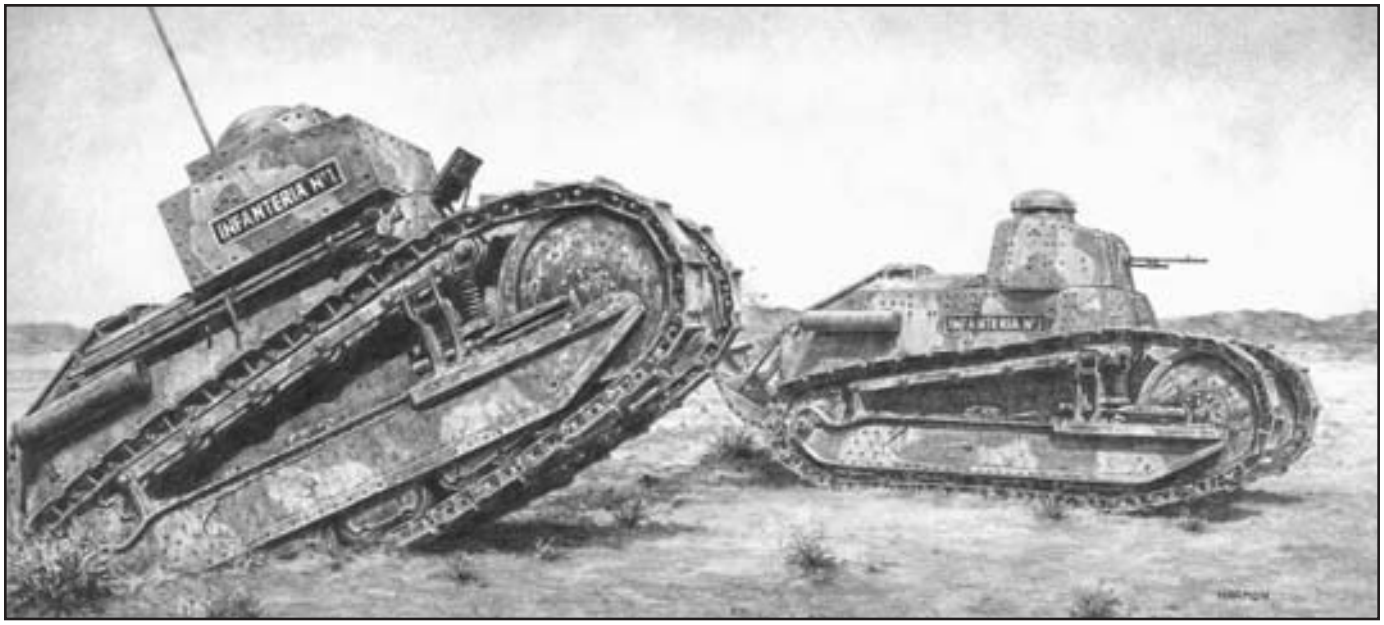

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Commenting on the Guadalajara operation, the U.S. Army attaché in Paris advised the MID that tank deployment with a motorized force would be futile unless command of the air and coordinated artillery and infantry support were provided. Also assessing the battle, Fuqua found republican intelligence lacking. Even though the Spanish antagonists spoke the same language and had numerous intelligence sources, the Italians, he reported, moved hundreds of miles by rail and roads and then concentrated within striking distance, causing little reaction from the republicans. Fuqua blamed this on traditional Iberian inertia and notorious Spanish indiscretion. The Italians, Fuqua reported, were too overconfident. Later, after visiting Italian prisoners, he concluded they were deficient in intelligence and lacked training to carry out a motorized operation.

After the Italian defeat at Guadalajara, it was the republican government's turn to become overconfident. An independent tank attack was planned on Mount Garabitas, a key artillery position for Franco's forces. Media correspondents were invited to view the attack. Strangely, this move made it impossible to keep the attack a secret. Pavlov's tanks, reportedly 50 T26s, attacked. Shortly, 22 fell into a Bodensperren and were captured. More discouraging for Pavlov was that a number of his attacking tanks broke down before they even engaged the enemy. The remaining tanks were met with antitank fire. Only 14 were able to retreat back to friendly lines. Fuqua concluded that cowardice played a large part in the battle. This, he blamed, was again due to poor troop training and coordination. Again, conclusions were reached that tanks should not be independently used unless supported by infantry and artillery. Fuqua's reports on the Guadalajara campaign became one of the most appealing lectures at the U.S. Army Command and General Staff School.

In October 1937, at Fuentes de Ebro, approximately 40 infantry, carrying T26s and recently arrived BT5s, again attacked nationalist positions without artillery and infantry support. For deep independent cavalry operations, such as pursuit and exploitation, the Red Army had produced thousands of fast BT5s that were derived from the American Christie design. The deployment of BT5s as mechanized cavalry, however, would not be the case in Spain. The defending nationalist Moors permitted the infantry carrying T26s and BT5s to overrun their trenches. One attaché reported the Moors had a "Roman holiday," picking off the mounted infantry. Some of the T26s and BT5s made progress, but as before, a Bodensperren stopped them and they were captured. Nevertheless, Fuqua was optimistic about the potential role for infantry carrying tanks, advising the War Department that a new tactical role for tanks had been demonstrated.

In the meantime, students at the U.S. Army War College began a series of detailed studies of the civil war. This included lessons learned on using mechanized vehicles, especially the deployment of tanks and antitank weapons. One major study compiled in October 1937 concluded that mechanization had not revolutionized the conduct of the war. It was noted that the gun-armor race favored antitank weapons, and the range of operations was now reduced by time-space factors that had, in the past, benefited mechanization.

In January, another war college analysis concluded that operations in Spain constituted no special case and no conclusions should be drawn. The war experience, the analysis noted, should only be considered as having a general military application. The reason for this observation was that the belligerents did not have a pre-war strategic operational plan. It was a civil war. As a result, commanders reacted to the tactical necessity of the moment rather than formulating a long-term strategic goal. Concerning tanks, the war college analysis claimed their employment had been strikingly faulty; vehicles lacked armor and armament, and were not supported by infantry and artillery. It was determined that the defense was superior to the offense, especially with the extensive use of antitank guns. This defensive mindset reflected an attitude similar to what existed on the Western Front during most of World War I. Most important, the Army War College explorations set the stage for a significant War Department General Staff policy over a future strategic and tactical doctrine on the employment of tanks. More so, the policy set the tone for an emerging antitank doctrine.

U.S. military professional journals also addressed in detail how the conflict shaped the course of future military operations. The *Field Artillery Journal* recorded that the best available lessons came from Spain. It admitted, as did most military journals, that tanks by themselves did not accomplish much. The article indi-

cated the war paralleled a lesson from World War I that there would be no progress in any attack unless sufficient artillery was provided, adding that victory depended on sufficient firepower at the decisive point. The branch journals also republished articles that appeared in French military reviews, which were preoccupied with the methodical battle and the idea of static warfare driven by the Maginot Line mentality. France lacked faith in independent armor deployment and kept their tanks closely tied to the infantry.

The *Cavalry Journal* concluded from an article in *La Revue d'Infanterie* that armaments favored the defense, because speedy and lightly armored vehicles were incapable of coping with modern antitank guns. The *Infantry Journal*, also drawing heavily from French sources, recorded that tanks in Spain were not capable of carrying through an independent attack. This source came from an article that appeared in *La Bulletin Belge des Sciences Militaires*. Quoting from the *La Revue d'Infanterie*, another *Infantry Journal* article noted that the development of antitank weapons nullified the World War I theory that tanks would dominant the future battlefield. The influential *Infantry Journal* claimed antitank guns had the edge over tanks. If developed further, the journal noted, antitank guns would neutralize the greatest ground threat of modern warfare. By now, most attachés and journal writers had reported on the eclipse of the tank due to the emergence and dominance of the flat trajectory antitank gun.

In April 1938, the U.S. War Department finally resolved the conflict over a tank policy by issuing, "Policies Governing Mechanization and the Tactical Employment of Mechanized Units." This reactive policy was primarily based on key information provided by attachés on military operations in Spain. The role of armor, the policy stated, was solely that of infantry accompanying tanks. It intended that tanks were to support the infantry and not operate beyond artillery. The new policy had strong support from General Malin Craig, the Army Chief of Staff.

The traditional American doctrine of linear open warfare, relying on massed artillery and maneuverability of the infantry, was the acknowledged doctrine through the 1930s. This infantry branch-driven dogma stifled the potential for increasing a movement toward a combined arms mechanized force necessary to achieve mobile dynamics at an operational level of warfare. General Craig, who was influenced by events in Spain, viewed a future American military force still capable of engaging in the traditional war of fire and maneuver dominated by the infantry and tactically supported by mounted cavalry and horse-drawn artillery. The Army Chief of Staff supported the infantry's position that tanks were to assist assaulting foot soldiers, and not engage in deep independent offensive operations. This attitude was heavily reinforced by attachés in Europe, especially Colonel Fuqua, who for years had been a tenacious opponent of an independent mechanized force.

By 1939, the U.S. Army Field Service Regulations (Tentative), which drew heavily from the 1923 manual, specified the primacy of the infantry and that antitank guns were first in defensive importance against mechanized forces. During the Spanish Civil War, most attachés emphasized the growing importance of antitank guns, thus bringing into question the eclipse of the tank. This attitude found its way into the War Department, the Army War College, and the U.S. Army Command and General Staff School. The reports from the attachés were reinforcing traditional doctrine, which gave dominance to the infantry over other combat arms. Conversely, studies were lacking on solutions to overcome numerous errors in tank deployment by the belligerents in Spain. The mechanized cavalry at Fort Knox was an

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exception, making efforts to resolve the issue of wrong lesson learned from the civil war.

One of Fuqua's critics, Major General Daniel Van Voorhis, Commanding General, V Corps, and the first commander of the mechanized cavalry at Fort Knox in 1931, commented on the attachés' reports. He argued that tank casualties in Spain were more representative of war expediencies rather than reflecting on a new theory in armor warfare. In Spain, tank formations were used in numbers too small to execute independent deep operations, such as pursuit and exploitation at an operational level. The T26s and BT5s were usually filtered away in small numbers at the tactical level and never used in mass. An observant U.S. Army attaché reinforced Van Voorhis' view, reporting that tanks used by the republican forces were never sufficiently used in mass to form an opinion. In addition, the republicans, at numerous times, deployed small units of tanks as offensive-defensive fire units.

Contradicting the attitudes emitting from Spain that the tank was dead, Van Voorhis instead moved the mechanized cavalry at Fort Knox on a path of relevance and readiness for a possible war. During Spring 1938 maneuvers, Van Voorhis — then in command of the 7th Cavalry Brigade (Mech) — demonstrated his resiliency by increasing the depth of mechanized combat in time and space with a balanced two-column thrust deep into the south at a mythical invader landing at Charleston, South Carolina. As the brigade formed up, Van Voorhis controlled the attacking force by radio from a two-seater Douglas O-46A observation plane. Over 500 vehicles of various sorts, including combat cars, were engaged to test a new organizational structure, equipment, and tactics. This dynamic maneuver, executing a deep two-column thrust with a mechanized force, was the prototype organizational structure of World War II armored divisions' combined arms combat commands.

In spite of the efforts at Fort Knox, the flawed lessons added to a multifaceted U.S. Army armor policy. For example, the imprecise lessons led to a defense-mobile reactive policy, the ill-fated tank destroyer doctrine. An artilleryman and chief of staff of the activated General Headquarters in 1940 and later commander of the Army ground forces in 1942, Lieutenant General Lesley J. McNair, drove this antitank doctrine. For him, armored divisions were too expensive, as was the necessity for motorized infantry. The deployment of tanks, he believed, was for pursuit and exploitation. He emphasized that the center of warfighting was the traditional infantry-artillery grouping, thus abating the status of the armored force as a separate combat branch during Word War II. In 1950, Congress made armor a separate combat branch and abolished cavalry.

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